

IN THE CLAIMS

This listing of the claim will replace all prior versions and listings of claim in the present application.

Listing of Claims

Claim 1 (canceled).

2. (previously presented) A database processing method for performing definition and operation of external file reference type data which references data stored on an outside of a database, comprising the steps of:

at a time of inserting external file reference type data, receiving position information indicative of a storage location of an external file and watch information for watching the external file, and storing both said position and watch information in said database; and

requesting a watch of the external file indicated by said position information according to said watch information.

3. (previously presented) A database processing method for performing definition and operation of external file reference type data which references data stored on an outside of a database, comprising the steps of:

at a time of searching external file reference type data, receiving a specification as to which one of column data and a content of an external file is to be fetched;

if the column data is specified, receiving position information indicative of a storage location of the external file and watch information for watching the external file as a search result; and

if the content of the external file is specified, obtaining data stored in the location indicated by the position information, and receiving the data thus obtained as a search result.

4. (previously presented) A database processing method for performing definition and operation of external file reference type data which is references data stored on an outside of a database, comprising the steps of:

at a time of updating external file reference type data, receiving update data and a specification as to which one of column data and a content of an external file is to be updated;

if the column data is specified, sending a termination notice of terminating a watch of the external file according to watch information for watching data to be updated;

re-writing position information indicative of a storage location of the external file and watch information for watching the external file, both the information having been received regarding the data to be updated as update data; and

requesting a watch of the external file according to the watch information thus re-written; and

if the content of the external file is specified, rewriting data stored in a location indicated by the position information with the update data thus received.

5. (previously presented) A database processing method for performing definition and operation of external file reference type data which references data stored on an outside of a database, comprising the steps of:

- at a time of deleting external file reference type data, receiving a specification as to whether a content of an external file is to be deleted;
- sending a termination notice of terminating a watch of the external file according to watch information of data to be deleted;
- deleting the data to be deleted; and
- if the content of the external file is specified, deleting data stored in a location indicated by position information.

6. (previously presented) A database processing method for performing definition and operation of external file reference type data which references data stored on an outside of a database, comprising the steps of:

- receiving a watch request for a watch of an external file, watching the external file thus requested, and, if the external file has been updated or deleted, sending an update note indicating update or deletion of the external file to a watch requester, and
- if a termination notice of terminating a watch of the external file is received, terminating the watch of the external file indicated by the termination notice.

7. (previously presented) The database processing method according to claim 6, wherein said step of sending the update notice to the watch requester includes a step of watching file processing performed at a location in which the external file is stored, and sending to the watch requester the update notice indicating update or deletion of the external file.

8. (new) A database processing method for performing definition and operation of external file reference type data stored on a second file server which references data stored on an outside of a database stored on a first file server coupled to said second file server via a network, said method comprising the steps of:

if the external file reference type data is inserted, receiving by said first file server a position information indicative of a storage location of an external file and watch information for watching said external file on said second file server, and storing both said position and watch information in said database on said first file server; and

requesting a watch of said external file indicated by said position information according to said watch information from said first file server to said second file server.

9. (new) A database processing method for performing definition and operation of external file reference type data stored on a second file server which references data stored on an outside of a database stored on a first file server

coupled to said second file server via a network, said method comprising the steps of:

if external file reference type data is searched, receiving by said first file server a specification as to which one of column data and a content of an external file is to be fetched;

if said column data is specified, receiving by said first file server a position information indicative of a storage location of said external file and watch information for watching said external file as a search result; and

if said content of the external file is specified, obtaining by said second file server data stored on said location indicated by said position information, and receiving by said first file server said data thus obtained as a search result.

10. (new) A database processing method for performing definition and operation of external file reference type data stored on a second file server which references data stored on an outside of a database stored on a first file server coupled to said second file server via a network, said method comprising the steps of:

at a time of updating external file type data, receiving by said first file server update data and a specification as to which one of column data and a content of an external file is to be updated;

if said column data is specified, sending from said first file server to said second file server a termination notice of terminating a watch of said external file according to watch information for watching data to be updated;

rewriting by said first file server a position information indicative of a storage location of said external file and watch information for watching said external file, both said information having been received regarding said data to be updated as update data; and

requesting a watch of said external file according to said watch information thus re-written from said first file server to said second file server; and

if said content of said external file is specified, rewriting by said second file server data stored in a location indicated by said position information with said update data thus received.

11. (new) A database processing method for performing definition and operation of external file reference type data stored on a second file server which references data stored on an outside of a database stored on a first file server coupled to said second file server via a network, said method comprising the steps of:

if external file reference type data is deleted, receiving by said first file server a specification as to whether a content of an external file is to be deleted;

sending from said first file server to said second file server a termination notice of terminating a watch of the external file according to watch information of data to be deleted;

if the content of said external file is not specified, deleting by said first file server said data to be deleted from said database of said first file server;

if said content of the external file is specified, deleting by said second file server data stored in a location of said external file indicated by position information.

12. (new) A database processing method for performing definition and operation of external file reference type data stored on a second file server which references data stored on an outside of a database stored on a first file server coupled to said second file server via a network, said method comprising the steps of:

receiving by said second file server a watch request for a watch of an external file from said first file server, watching by said second file server said external file thus requested, and, if said external file has been updated or deleted on said second file server, sending from said second file server an update notice indicating update or deletion of said external file to said first file server; and

if a termination notice of terminating a watch of said external file is received from said first file server, terminating said watch of said external file indicated by said termination notice.

13. (new) The database processing method according to claim 12, wherein said step of sending said update notice to said first file server includes a step of watching by said second file server file processing performed at a location in which the external file is stored, and sending from said second file server to said first file server said update notice indicating update or deletion of said external file.